# **Statement of Basis of the Federal Operating Permit**

## Shell Chemical LP

Site Name: Shell Technology Center Houston Physical Location: 3333 Highway 6 S Nearest City: Houston County: Harris

> Permit Number: O1604 Project Type: Renewal

The North American Industry Classification System (NAICS) Code: 541710 NAICS Name: Research and Development in the Physical, Engineering, and Life Sciences

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;

A basis for applying permit shields;

A list of the federal regulatory applicability determinations;

A table listing the determination of applicable requirements;

A list of the New Source Review Requirements;

The rationale for periodic monitoring methods selected;

The rationale for compliance assurance methods selected;

A compliance status: and

A list of available unit attribute forms.

Prepared on: July 26, 2018

# Operating Permit Basis of Determination

#### **Permit Area Process Description**

The Shell Technology Center Houston (STCH) is an industrial research, technology and development installation for chemical and petroleum processes and transportation. The 200-acre site, about 20 miles west of downtown Houston, contains 37 buildings with a total area of more than one million square feet. The three main laboratory/office buildings are two-story with a central service corridor, which carry utilities to the laboratories. Specialized laboratories are in individually designed buildings, most of which are connected to the other buildings by enclosed corridors. Offices are located primarily along the outer perimeter of the various buildings. Special features include a polymer applications laboratory for studying behavior of polymer in fabrication and processing equipment like that used by polymer product manufacturers. There are microreactor, bench-scale, and pilot plant facilities for studies on refining and chemical processes. These have state-of-art instrumentation and control equipment, including on-line computers for data acquisition and processing. There is a facility for studies in combustion of heavy fuels, plus facilities for testing oil products, including single and multicylinder research engines with on-line computers, and a variety of highly instrumented chassis dynamometer installations. Among the latter are controlled-climate chambers that can be operated at temperatures ranging from -10 degrees to 120 degrees Fahrenheit and a chamber for measuring automobile emissions with on-line analytical instruments and computers.

#### **FOPs at Site**

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

#### **Major Source Pollutants**

The table below specifies the pollutants for which the site is a major source:

Major Pollutants
------------------

# Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - o Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - o Protection of Stratosphere Ozone

- Permit Location
- Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - o Additional Monitoring Requirements
  - o Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list

#### General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

#### Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

#### Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have

sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

#### Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

# Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are

burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

#### **Federal Regulatory Applicability Determinations**

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No

#### **Basis for Applying Permit Shields**

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

#### **Insignificant Activities**

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

- 1. Office activities such as photocopying, blueprint copying, and photographic processes.
- 2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
- 3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
- 4. Outdoor barbecue pits, campfires, and fireplaces.

- 5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
- 6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
- 7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
- 8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
- 9. Vehicle exhaust from maintenance or repair shops.
- 10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
- 11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
- 12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
- 13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 15. Well cellars.
- 16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
- 17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
- 18. Equipment used exclusively for the melting or application of wax.
- 19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
- 20. Shell core and shell mold manufacturing machines.
- 21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
- 22. Equipment used for inspection of metal products.
- 23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
- 24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
- Battery recharging areas.
- 26. Brazing, soldering, or welding equipment.

#### **Determination of Applicable Requirements**

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at <a href="https://www.tceq.texas.gov/permitting/air/nav/air\_all\_ua\_forms.html">www.tceq.texas.gov/permitting/air/nav/air\_all\_ua\_forms.html</a>.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at <a href="https://www.tceq.texas.gov/permitting/air/nav/air\_supportsys.html">www.tceq.texas.gov/permitting/air/nav/air\_supportsys.html</a>. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

#### Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

# **Determination of Applicable Requirements**

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
BLDG BD	30 TAC Chapter 117, Subchapter B	R7ICI-01	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
BLDG BD	40 CFR Part 60, Subpart IIII	601111-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.	
			Diesel = Diesel fuel is used.	
			Kilowatts = Power rating greater than or equal to 130 KW and less than or equal to 368 KW.	
			Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.	
			Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine.	
			Service = CI ICE is an emergency engine.	
			Standards = The emergency CI ICE does not meet the standards applicable to non-emergency engines.	
			Commencing = CI ICE was newly constructed after 07/11/2005.	
			Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.	
			Manufacture Date = Date of manufacture was after 04/01/2006.	
			Model Year = CI ICE was manufactured in model year 2013.	
BLDG BD	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	
BLDG C	30 TAC Chapter 117, Subchapter B	R7ICI-01	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
BLDG C	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.	
			Diesel = Diesel fuel is used.	
			Kilowatts = Power rating greater than or equal to 130 KW and less than or equal to 368 KW.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.	
			Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine.	
			Service = CI ICE is an emergency engine.	
			Standards = The emergency CI ICE does not meet the standards applicable to non-emergency engines.	
			Commencing = CI ICE was newly constructed after 07/11/2005.	
			Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.	
			Manufacture Date = Date of manufacture was after 04/01/2006.	
			Model Year = CI ICE was manufactured in model year 2012.	
BLDG C	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	
BLDG CA	30 TAC Chapter 117, Subchapter B	R7ICI-01	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
BLDG CA	40 CFR Part 60, Subpart IIII	601111-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.	
			Diesel = Diesel fuel is used.	
			Kilowatts = Power rating is greater than 560 KW and less than or equal to 2237 KW.	
			Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.	
			Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine.	
			Service = CI ICE is an emergency engine.	
			Standards = The emergency CI ICE does not meet the standards applicable to non-emergency engines.	
			Commencing = CI ICE was newly constructed after 07/11/2005.	
			Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Manufacture Date = Date of manufacture was after 04/01/2006.	
			Model Year = CI ICE was manufactured in model year 2009.	
BLDG CA	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP greater than 500 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	
BLDG M	30 TAC Chapter 117, Subchapter B	R7ICI-01	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
BLDG M	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.	
			Diesel = Diesel fuel is used.	
			Kilowatts = Power rating greater than or equal to 130 KW and less than or equal to 368 KW.	
			Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.	
			Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine.	
			Service = CI ICE is an emergency engine.	
			Standards = The emergency CI ICE does not meet the standards applicable to non-emergency engines.	
			Commencing = CI ICE was newly constructed after 07/11/2005.	
			Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.	
			Manufacture Date = Date of manufacture was after 04/01/2006.	
			Model Year = CI ICE was manufactured in model year 2009.	
BLDG M	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
BLDG MS	30 TAC Chapter 117, Subchapter B	R7ICI-01	Fuel Flow Monitoring = Unit is a diesel engine operating with a run time meter and using monthly fuel use records maintained for each engine per 30 TAC §§ 117.140(a)(2)(C), 117.340(a)(2)(C) or 117.440(a)(2)(C).	
			NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9)	
			CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option	
			CO Averaging Method = Complying with the applicable emission limit using a 30-day rolling average.	
			CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS.	
			EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid.	
			Type of Service = SRIC engine not meeting an exemption	
			Fuel Fired = Petroleum-based diesel fuel	
			NOx Averaging Method = Complying with the applicable emission limit using a 30-day rolling average.	
			Engine Type = Lean-burn	
			NOx Reduction = None	
			ESAD Date Placed in Service = Installed, modified, reconstructed or relocated on or after October 1, 2007.	
			NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000	
			Diesel HP Rating = Horsepower rating is 25 hp or greater, but less than 50 hp.	
BLDG MS	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.	
			Diesel = Diesel fuel is used.	
			Kilowatts = Power rating is greater than or equal to 19 KW and less than 37 KW.	
			Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.	
			Filter = The CI ICE is not equipped with a diesel particulate filter.	
			Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine.	
			Service = CI ICE is a non-emergency engine.	
			Commencing = CI ICE was newly constructed after 07/11/2005.	
			Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.	
			Manufacture Date = Date of manufacture was after 04/01/2006.	
			Model Year = CI ICE was manufactured in model year 2010.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
BLDG MS	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP less than 100 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	
BLDG N	30 TAC Chapter 117, Subchapter B	R7ICI-01	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
BLDG N	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.	
			Diesel = Diesel fuel is used.	
			Kilowatts = Power rating is greater than 560 KW and less than or equal to 2237 KW.	
			Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.	
			Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine.	
			Service = CI ICE is an emergency engine.	
			Standards = The emergency CI ICE does not meet the standards applicable to non-emergency engines.	
			Commencing = CI ICE was newly constructed after 07/11/2005.	
			Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.	
			Manufacture Date = Date of manufacture was after 04/01/2006.	
			Model Year = CI ICE was manufactured in model year 2009.	
BLDG N	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP greater than 500 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	
BLDG R	30 TAC Chapter 117, Subchapter B	R7ICI-01	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
BLDG R	40 CFR Part 60, Subpart IIII	601111-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Diesel = Diesel fuel is used.	
			Kilowatts = Power rating greater than or equal to 130 KW and less than or equal to 368 KW.	
			Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.	
			Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine.	
			Service = CI ICE is an emergency engine.	
			Standards = The emergency CI ICE does not meet the standards applicable to non-emergency engines.	
			Commencing = CI ICE was newly constructed after 07/11/2005.	
			Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.	
			Manufacture Date = Date of manufacture was after 04/01/2006.	
			Model Year = CI ICE was manufactured in model year 2009.	
BLDG R	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	
BLDG SO	30 TAC Chapter 117, Subchapter B	R7ICI-01	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
BLDG SO	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.	
			Diesel = Diesel fuel is used.	
			Kilowatts = Power rating is greater than 560 KW and less than or equal to 2237 KW.	
			Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.	
			Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine.	
			Service = CI ICE is an emergency engine.	
			Standards = The emergency CI ICE does not meet the standards applicable to non-emergency engines.	
			Commencing = CI ICE was newly constructed after 07/11/2005.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.	
			Manufacture Date = Date of manufacture was after 04/01/2006.	
			Model Year = CI ICE was manufactured in model year 2010.	
BLDG SO	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP greater than 500 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	
BLDG SU2	30 TAC Chapter 117, Subchapter B	R7ICI-01	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
BLDG SU2	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005.	
			Diesel = Diesel fuel is used.	
			Kilowatts = Power rating greater than or equal to 368 KW and less than or equal to 560KW.	
			Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.	
			Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine.	
			Service = CI ICE is an emergency engine.	
			Standards = The emergency CI ICE does not meet the standards applicable to non-emergency engines.	
			Commencing = CI ICE was newly constructed after 07/11/2005.	
			Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.	
			Manufacture Date = Date of manufacture was after 04/01/2006.	
			Model Year = CI ICE was manufactured in model year 2012.	
BLDG SU2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP greater than 500 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
FW PUMP	30 TAC Chapter 117, Subchapter B	R7ICI-01	Type of Service = Existing diesel fuel-fired engine, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average that has not been modified, reconstructed or relocated on or after October 1, 2001	
FW PUMP	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.	
			Nonindustrial Emergency Engine = Stationary RICE is defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.	
MICRONGENG	30 TAC Chapter 117, Subchapter B	R7ICI-01	Fuel Flow Monitoring = The unit is equipped with a continuous monitoring system that continuously monitors horsepower and hours of operation per 30 TAC §§ 117.140(a)(2)(D), 117.340(a)(2)(D) or 117.440(a)(2)(D).	
			NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9)	
			CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option	
			CO Averaging Method = Complying with the applicable emission limit using a 30-day rolling average.	
			CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS.	
			EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid.	
			Type of Service = SRIC engine not meeting an exemption	
			Fuel Fired = Natural gas	
			NOx Averaging Method = Complying with the applicable emission limit using a 30-day rolling average.	
			Engine Type = Lean-burn	
			NOx Reduction = None	
			NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000	
MICRONGENG	40 CFR Part 60, Subpart JJJJ	60JJJJ-01	Construction/Reconstruction/Modification Date = The stationary spark ignition (SI) internal combustion engine (ICE) commenced construction, reconstruction or modification after June 12, 2006.	
			Manufactured Date = Date of manufacture is on or after January 1, 2011.	
			Test Cell = The SI ICE is not being tested at an engine test cell/stand.	
			Certified = Purchased a certified SI ICE.	
			Exemption = The SI ICE is not exempt.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Operation = Operating and maintaining the certified SI ICE and control device according to manufacturer's written instructions.	
			Temp Replacement = The SI ICE is not acting as a temporary replacement.	
			Horsepower = Maximum engine power greater than or equal to 100 HP and less than 500 HP.	
			Fuel = SI ICE that uses natural gas.	
			Service = SI ICE is a non-emergency engine.	
			Severe Duty = The SI ICE is not a severe-duty engine.	
			Lean Burn = The SI ICE is a lean-burn engine.	
			Commencing = SI ICE that is commencing new construction.	
MICRONGENG	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.	
			Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP.	
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	
841-SUMP	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
DIV-TK	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 40,000 gallons	
DIV-TK	40 CFR Part 60,	R5112-01	Product Stored = Waste mixture of indeterminate or variable composition	
	Subpart Kb		Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)	
			Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
T127	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T128	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T129	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T136	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T415	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T416	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T417	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T418	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
T419	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T420	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T421	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T422	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T501	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	

		Tank Description = Tank does not require emission controls	
		Product Stored = VOC other than crude oil or condensate	
		True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
		Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
Chapter R5	5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
		Tank Description = Tank does not require emission controls	
		Product Stored = VOC other than crude oil or condensate	
		True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
		Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
Chapter R5	5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
		Tank Description = Tank does not require emission controls	
		Product Stored = VOC other than crude oil or condensate	
		True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
		Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
Chapter R5	5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
		Tank Description = Tank does not require emission controls	
		Product Stored = VOC other than crude oil or condensate	
		True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
		Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
Chapter R5	5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.  Tank Description = Tank does not require emission controls	
		Product Stored = VOC other than crude oil or condensate	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T511	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T558	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T559	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T561	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
T562	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T563	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T571	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = Crude oil and/or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 40,000 gallons	
T572	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = Crude oil and/or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 40,000 gallons	
T579	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T580	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T581	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
TK7011R1A	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
TK7011R1B	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank does not require emission controls	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is less than 1.0 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
V840	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank using a vapor recovery system (VRS)	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
			Control Device Type = Other vapor destruction unit	
V840	30 TAC Chapter 115, Storage of VOCs	R5112-02	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	
			Tank Description = Tank using a vapor recovery system (VRS)	
			Product Stored = VOC other than crude oil or condensate	
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia	
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
			Control Device Type = Flare	
C2H4 UNLOAD	30 TAC Chapter 115, Loading and	R5112-01	Chapter 115 Control Device Type = Vapor control system with a vapor combustor.	
	Unloading of VOC		Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.	
			Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.	
			Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.	
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.	
			Transfer Type = Only unloading.	
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.	
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.	
			Control Options = Pressurized loading system.	
C2H4 UNLOAD	30 TAC Chapter	R5112-02	Chapter 115 Control Device Type = Vapor control system with a flare.	
	115, Loading and Unloading of VOC		Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.	
			Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.	
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.	
			Transfer Type = Only unloading.	
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.	
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.	
			Control Options = Pressurized loading system.	
DSLUNLOAD1	30 TAC Chapter 115, Loading and	R5112-01	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.	
	Unloading of VOC		Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.	
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.	
			Transfer Type = Only unloading.	
			True Vapor Pressure = True vapor pressure less than 0.5 psia.	
MBBPLOAD	30 TAC Chapter 115, Loading and	R5112-01	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.	
	Unloading of VOC		Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.	
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.	
			Transfer Type = Only unloading.	
			True Vapor Pressure = True vapor pressure less than 0.5 psia.	
MBUNLOAD	30 TAC Chapter 115, Loading and	R5112-01	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.	
	Unloading of VOC		Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.	
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.	
			Transfer Type = Only unloading.	
			True Vapor Pressure = True vapor pressure less than 0.5 psia.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
BLR	30 TAC Chapter 117, Subchapter B	R7ICI-01	NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].	
			Unit Type = Other industrial, commercial, or institutional boiler.	
			Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr.	
			NOx Monitoring System = Maximum emission rate testing.	
			Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).	
			CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.	
			CO Monitoring System = Monitored by method other than CEMS or PEMS.	
			EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.	
			Fuel Type #1 = Natural gas.	
			NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.	
			NOx Reductions = No $NO_x$ reduction.	
			Annual Heat Input = Annual heat input is greater than 2.8(10 <sup>11</sup> ) Btu/yr, based on rolling 12-month average.	
BLR	40 CFR Part 60,	•	Construction/Modification Date = After February 28, 2005.	
	Subpart Dc		PM Monitoring Type = No particulate monitoring.	
			Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW).	
			SO2 Inlet Monitoring Type = No SO <sub>2</sub> monitoring.	
			Other Subparts = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB.	
			SO2 Outlet Monitoring Type = No SO <sub>2</sub> monitoring.	
			Heat Input Capacity = Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to 75 MMBtu/hr (22 MW).	
			Technology Type = None.	
			D-Series Fuel Type = Natural gas.	
			47C-Option = COMS exemption § 60.47c(e) for a facility not using post-combustion technology (except a wet scrubber), burns only gaseous fuels or fuel oils that contain no more than 0.5 % by weight sulfur, and emissions of CO are 0.15 lb/MMBtu average.	
			ACF Option - SO2 = Other ACF or no ACF.	
			ACF Option - PM = Other ACF or no ACF.	
			30% Coal Duct Burner = The facility does not combust coal in a duct burner	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner.	
S-8B	30 TAC Chapter 117, Subchapter B	R7ICI-01	NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].	
			Unit Type = Other industrial, commercial, or institutional boiler.	
			Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr.	
			NOx Monitoring System = Predictive emissions monitoring system.	
			Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).	
			CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.	
			CO Monitoring System = Monitored by method other than CEMS or PEMS.	
			EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.	
			Fuel Type #1 = Natural gas.	
			NOx Emission Limit Average = Emission limit in pounds/hour on a block one-hour average.	
			NOx Reductions = No NO <sub>x</sub> reduction.	
			Annual Heat Input = Annual heat input is greater than 2.8(10 <sup>11</sup> ) Btu/yr, based on rolling 12-month average.	
S-4	30 TAC Chapter 111, Visible	R1111-01	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.	
	Emissions		Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.	
			Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.	
S-4	30 TAC Chapter 115, HRVOC Vent Gas	R5720-01	Out of Service = Flare was not permanently out of service by April 1, 2006. Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time.  Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time.  Alternative Monitoring = No alternative monitoring and test methods are used. Minor Modification = No minor modifications to the monitoring and test methods are used. Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC. Flare Type = Flare is complying with the requirements of § 115.725(d) to demonstrate compliance.	Deleted Monitoring/Testing § 115.725(m)(1) since Shell does not use an online calorimeter to determine the net heating value of the gas sent to the flare.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	40 CFR Part 60,	60A-01	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.	
	Subpart A		Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).	
			Flare Assist Type = Non-assisted	
			Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec).	
			Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)	
S-9A	30 TAC Chapter 117, Subchapter B	R7ICI-01	Fuel Flow Monitoring = Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).	
			Megawatt Rating = MR is greater than or equal to 1 MW and less than 10 MW and unit is not an opt-in unit.	
			CO Emission Limitation = Title 30 TAC § 117.310(c)(1).	
			EGF System Cap Unit = The engine is not used as an electric generating facility to generate electricity for sale to the electric grid.	
			Averaging Method = Complying with the applicable emission limit using a 30-day rolling average.	
			CO Monitoring System = Monitoring other than CEMS, PEMS or steam/fuel or water/fuel ratio monitoring.	
			NOx Reduction = No NO <sub>x</sub> reduction.	
			Service Type = Stationary gas turbine.	
			NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(10) or 117.310(a)(11).	
			NOx Monitoring System = Maximum emission rate testing.	
S-9A	40 CFR Part 60,	60GG-01	NOx Control Method = No NO <sub>x</sub> control method is used.	
	Subpart GG		Peak Load Heat Input = Heat Input is greater or equal to 10 MMBtu/hr (10.7 GJ/hr) and less than or equal to 100 MMBtu/hr (107.2 GJ/hr).	
			Construction/Modification Date = After October 3, 1977 and on or before January 27, 1982.	
			NOx Allowance = The owner or operator is not electing to use a NO <sub>x</sub> allowance in determining emission limits in 40 CFR § 60.332(a).	
			NOx Monitoring Method = No continuous monitoring system is used.	
			Sulfur Content = Compliance is demonstrated by determining the sulfur content of the fuel.	
			Turbine Cycle = Unit does not recover heat from the gas turbine exhaust to preheat inlet combustion air; or to heat water or generate steam.	
			Fuel Type Fired = Natural gas meeting the definition in § 60.331(u).	
			Subpart GG Service Type = Type of service other than research and	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			development, emergency, military or electrical utility generation.	
			Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage.	
			Fuel Monitoring Schedule = Fuel meets the definition of natural gas in 40 CFR § 60.331(u) and is not monitored.	
OWS1	30 TAC Chapter 115, Water Separation	R5131-01	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.	
			Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.	
S-2A	30 TAC Chapter 115, HRVOC Vent	R2720-02	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.	
	Gas		Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).	
			Vent Gas Stream Control = Vent gas stream is controlled by a flare.	
S-2A	30 TAC Chapter	30 TAC Chapter 115, HRVOC Vent Gas	Alternative Monitoring = Not using alternative monitoring and testing methods.	
	· ·		HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.	
			Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).	
			Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule.	
			Vent Gas Stream Control = Vent gas stream is controlled by a control device other than a flare.	
			Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities.	
			Waived Testing = The executive director has not waived testing for identical vents.	
			Testing Requirements = Process knowledge to determine maximum potential HRVOC hourly emissions for analyzer vents, stream system vents, vent gas streams with no HRVOC except during emission event or degassing safety device in lieu of testing.	
S-2A	30 TAC Chapter 115, Vent Gas	R5121-01	Alternate Control Requirement = Alternate control is not used.	
	Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B,	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Division 2.	
			Control Device Type = Vapor combustor not considered to be a flare.	
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
			Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg).	
			VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.	
115,	30 TAC Chapter 115, Vent Gas Controls	R5121-02	Alternate Control Requirement = Alternate control is not used.	
			Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.	
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	
			Control Device Type = Smokeless flare	
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
			Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg).	
			VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.	

<sup>\* -</sup> The "unit attributes" or operating conditions that determine what requirements apply

\*\* - Notes changes made to the automated results from the DSS, and a brief explanation why

#### **NSR Versus Title V FOP**

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

#### **New Source Review Requirements**

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room,

located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. In addition, many of the permits are accessible online through the link provided below. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. Registrations submitted by permittees are also available online through the link provided below. The following table specifies the permits by rule that apply to the site.

The status of air permits, applications, and Permits by Rule (PBR) registrations may be found by performing the appropriate search of the databases located at the following website:

#### www.tceq.texas.gov/permitting/air/nav/air\_status\_permits.html

Details on how to search the databases are available in the **Obtaining Permit Documents** section below.

#### **New Source Review Authorization References**

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.					
Authorization No.: 1190	Issuance Date: 08/25/2015				
Authorization No.: 91674	Issuance Date: 05/02/2011				
Permits By Rule (30 TAC Chapter 106) for the Application Area					
Number: 106.124	Version No./Date: 09/04/2000				
Number: 106.261	Version No./Date: 09/04/2000				
Number: 106.262	Version No./Date: 09/04/2000				
Number: 106.263	Version No./Date: 11/01/2001				
Number: 106.371	Version No./Date: 09/04/2000				
Number: 106.412	Version No./Date: 09/04/2000				
Number: 106.433	Version No./Date: 09/04/2000				
Number: 106.452	Version No./Date: 09/04/2000				
Number: 106.454	Version No./Date: 11/01/2001				
Number: 106.472	Version No./Date: 09/04/2000				
Number: 106.473	Version No./Date: 09/04/2000				
Number: 106.475	Version No./Date: 09/04/2000				
Number: 106.476	Version No./Date: 09/04/2000				
Number: 106.478	Version No./Date: 09/04/2000				
Number: 106.492	Version No./Date: 09/04/2000				
Number: 106.511	Version No./Date: 09/04/2000				
Number: 106.512	Version No./Date: 09/04/2000				
Number: 106.512	Version No./Date: 06/13/2001				
Number: 106.532	Version No./Date: 09/04/2000				

#### **Emission Units and Emission Points**

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

## **Monitoring Sufficiency**

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

### **Obtaining Permit Documents**

The New Source Review Authorization References table in the FOP specifies all NSR authorizations that apply at the permit area covered by the FOP. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). They can also be obtained electronically from TCEQ's Central File Room Online (<a href="https://www.tceq.texas.gov/goto/cfr-online">https://www.tceq.texas.gov/goto/cfr-online</a>). Guidance documents that describe how to search electronic records, including Permits by Rule (PBRs) or NSR permits incorporated by reference into an FOP, archived in the Central File Room server are available at <a href="https://www.tceq.texas.gov/permitting/air/nav/air\_status\_permits.html">https://www.tceq.texas.gov/permitting/air/nav/air\_status\_permits.html</a>

All current PBRs are contained in Chapter 106 and can be viewed at the following website:

https://www.tceq.texas.gov/permitting/air/permitbyrule/air\_pbr\_index.html

Previous versions of 30 TAC Chapter 106 PBRs may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/old106list/index106.html

Historical Standard Exemption lists may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical rules/oldselist/se index.html

Additional information concerning PBRs is available on the TCEQ website:

# https://www.tceq.texas.gov/permitting/air/nav/air\_pbr.html

1. Were there any out-of-compliance units listed on Form OP-ACPS?	Compliance Review  1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on May 1, 2018.  Site rating: 3.53 / Satisfactory Company rating: 9.89 / Satisfactory  (High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)  2. Has the permit changed on the basis of the compliance history or site/company rating?	0
2. Is a compliance plan and schedule included in the permit?	Site/Permit Area Compliance Status Review	_
OP-UA1 - Miscellaneous and Generic Unit Attributes OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes OP-UA3 - Storage Tank/Vessel Attributes OP-UAA3 - Storage Tank/Vessel Attributes OP-UAA5 - Drocess Heater/Furnace Attributes OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes OP-UA7 - Flare Attributes OP-UA7 - Flare Attributes OP-UA8 - Coal Preparation Plant Attributes OP-UA8 - Coal Preparation Plant Attributes OP-UA9 - Nonmetallic Mineral Process Plant Attributes OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes OP-UA11 - Stationary Turbine Attributes OP-UA11 - Stationary Turbine Attributes OP-UA13 - Industrial Process Cooling Tower Attributes OP-UA13 - Industrial Process Cooling Tower Attributes OP-UA14 - Water Separator Attributes OP-UA14 - Water Separator Attributes OP-UA16 - Solvent Degreasing Machine Attributes OP-UA17 - Sibillation Unit Attributes OP-UA18 - Surface Coating Operations Attributes OP-UA19 - Wastewater Unit Attributes OP-UA19 - Wastewater Unit Attributes OP-UA20 - Asphalt Operations Attributes OP-UA21 - Grain Elevator Attributes OP-UA21 - Grain Elevator Attributes OP-UA22 - Pinting Attributes OP-UA23 - Synthetic Fiber Production Attributes OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes OP-UA25 - Synthetic Fiber Production Attributes OP-UA26 - Polymer Manufacturing Attributes OP-UA27 - Nitric Acid Manufacturing Attributes OP-UA28 - Polymer Manufacturing Attributes OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes OP-UA31 - Lead Smelting Attributes OP-UA32 - Capper and Zinc Smelting/Brass and Bronze Production Attributes OP-UA32 - I-Lead Smelting Attributes OP-UA33 - I-Lead Smelting Attributes OP-UA34 - Polymer Manufacturing Plant Attributes OP-UA35 - Incinerator Attributes OP-UA36 - Ead-Raid Manufacturing OP-UA37 - Basic Oxygen Processing Plant Attributes OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes	Were there any out-of-compliance units listed on Form OP-ACPS?      Is a compliance plan and schedule included in the permit?  N	ס
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes OP-UA3 - Storage Tank/Vessel Attributes OP-UA5 - Process Heater/Furnace Attributes OP-UA6 - Process Heater/Furnace Attributes OP-UA7 - Flare Attributes OP-UA7 - Flare Attributes OP-UA8 - Coal Preparation Plant Attributes OP-UA9 - Monmetallic Mineral Process Plant Attributes OP-UA9 - Nonmetallic Mineral Process Plant Attributes OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes OP-UA11 - Stationary Turbine Attributes OP-UA11 - Stationary Turbine Attributes OP-UA12 - Fugitive Emission Unit Attributes OP-UA13 - Industrial Process Cooling Tower Attributes OP-UA13 - Industrial Process Cooling Tower Attributes OP-UA14 - Surface Tower Degreasing Machine Attributes OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes OP-UA16 - Solvent Degreasing Machine Attributes OP-UA17 - Distillation Unit Attributes OP-UA18 - Surface Coating Operations Attributes OP-UA19 - Wastewater Unit Attributes OP-UA20 - Asphalt Operations Attributes OP-UA21 - Grain Elevator Attributes OP-UA22 - Printing Attributes OP-UA22 - Printing Attributes OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes OP-UA25 - Synthetic Fiber Production Attributes OP-UA26 - Electroplating and Anodizing Unit Attributes OP-UA27 - Nitric Acid Manufacturing Attributes OP-UA29 - Glass Manufacturing Unit Attributes OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes OP-UA31 - Lead Smelting Attributes OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes OP-UA32 - Incinerator Attributes OP-UA33 - Metallic Mineral Processing Plant Attributes OP-UA34 - Pharmaceutical Manufacturing OP-UA35 - Incinerator Attributes OP-UA36 - Lead-Acid Battery Manufacturing Plant Attributes OP-UA37 - Basic Oxygen Process Furnace Unit Attributes OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes	Available Unit Attribute Forms	
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes OP-UA39 - Sterilization Source Attributes	OP-UA1 - Miscellaneous and Generic Unit Attributes OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes OP-UA3 - Storage Tank/Vessel Attributes OP-UA4 - Loading/Unloading Operations Attributes OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes OP-UA7 - Flare Attributes OP-UA8 - Coal Preparation Plant Attributes OP-UA9 - Nonmetallic Mineral Process Plant Attributes OP-UA9 - Nonmetallic Mineral Process Plant Attributes OP-UA11 - Stationary Turbine Attributes OP-UA11 - Stationary Turbine Attributes OP-UA12 - Fugitive Emission Unit Attributes OP-UA13 - Industrial Process Cooling Tower Attributes OP-UA14 - Water Separator Attributes OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes OP-UA16 - Solvent Degreasing Machine Attributes OP-UA17 - Distillation Unit Attributes OP-UA17 - Distillation Unit Attributes OP-UA19 - Wastewater Unit Attributes OP-UA19 - Wastewater Unit Attributes OP-UA20 - Asphalt Operations Attributes OP-UA21 - Forian Elevator Attributes OP-UA22 - Printing Attributes OP-UA22 - Printing Attributes OP-UA23 - Synthetic Fiber Production Attributes OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes OP-UA26 - Electroplating and Anodizing Unit Attributes OP-UA27 - Nitric Acid Manufacturing Attributes OP-UA28 - Polymer Manufacturing Attributes OP-UA29 - Glass Manufacturing Unit Attributes OP-UA29 - Glass Manufacturing Unit Attributes OP-UA31 - Lead Smelting Attributes OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes OP-UA33 - Incinerator Attributes OP-UA34 - Pharmaceutical Manufacturing OP-UA35 - Incinerator Attributes	
OP-UA41 - Dry Cleaning Facility Attributes OP-UA42 - Phosphate Fertilizer Manufacturing Attributes OP-UA43 - Sulfuric Acid Production Attributes	OP-UA39 - Sterilization Source Attributes OP-UA40 - Ferroalloy Production Facility Attributes OP-UA41 - Dry Cleaning Facility Attributes OP-UA42 - Phosphate Fertilizer Manufacturing Attributes OP-UA43 - Sulfuric Acid Production Attributes OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes	

- OP-UA45 Surface Impoundment Attributes
- OP-UA46 Epoxy Resins and Non-Nylon Polyamides Production Attributes
- OP-UA47 Ship Building and Ship Repair Unit Attributes
- OP-UA48 Air Oxidation Unit Process Attributes
- OP-UA49 Vacuum-Producing System Attributes
- OP-UA50 Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
- OP-UA51 Dryer/Kiln/Oven Attributes
- OP-UA52 Closed Vent Systems and Control Devices
- OP-UA53 Beryllium Processing Attributes
- OP-UA54 Mercury Chlor-Alkali Cell Attributes
- OP-UA55 Transfer System Attributes
- OP-UA56 Vinyl Chloride Process Attributes
- OP-UA57 Cleaning/Depainting Operation Attributes
- **OP-UA58 Treatment Process Attributes**
- OP-UA59 Coke By-Product Recovery Plant Attributes
- OP-UA60 Chemical Manufacturing Process Unit Attributes
- OP-UA61 Pulp, Paper, or Paperboard Producing Process Attributes
- OP-UA62 Glycol Dehydration Unit Attributes
- OP-UA63 Vegetable Oil Production Attributes